DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-022080
Date Inspected: 04-Jan-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:	An Qing Xiang, Qiu Wen			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14, OBG 13W (NWIT # 08025)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

DP3148-001-241, 245, 251, 254, 257
DP3148-001-248 (UT class “A” rejectable indication found during inspection)

During Ultrasonic Testing of weld joint DP3148-001-248, one class “A” UT rejectable indication observed and confirmed with ZPMC NDT personnel. This issue has been discussed with CT lead QA and as per discussion no Incident Report to be generated. ZPMC agreed to do repair as comply with contract documents. Attached photograph provide additional detail.

BAY 14, OBG 13AW (NWIT # 08030)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3013AD-026, 027
SEG3013Q-040

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 13AW

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3013B-303 [Stiffener of K-plate KP3016A to Floor Beam (FB) 3200, complete joint penetration (CJP) weld, at PP120]. The welder is identified as 066261 and was observed welding in the 4G position. ZPMC QC was identified as Li Ping. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3013M-036 [K-plate KP3009A to Floor Beam (FB) 3180, complete joint penetration (CJP) weld, at PP118.35]. The welder is identified as 037748 and was observed welding in the 4G position. ZPMC QC was identified as Li Ping. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3013AA-052 [Edge Plate (EP) 3020C to Floor Beam (FB) 3189A, complete joint penetration (CJP) weld, at PP119]. The welder is identified as 045280 and was observed welding in the 3G position. ZPMC QC was identified as Li Ping. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3013AA-016 [Edge Plate (EP) 3020B to Floor Beam (FB) 3178A, complete joint penetration (CJP) weld, at PP118]. The welder is identified as 045240 and was observed welding in the 3G position. ZPMC QC was identified as Li Ping. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

OBG Seg 13BW

Repair welding of weld joint no: SEG3014S-052 [Vertical Plate (VP) 3013A to Side Plate (SP) 3106A, CJP weld at PP121.5]. The welder is identified as 045204 and was observed welding in the 2G position. Welding process was identified as SMAW. ZPMC QC was identified as Mr. Wang Xiang Pin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR 2625 Rev-0.

OBG Seg 13CW

Repair welding of weld joint no: SEG3015U-005 [Vertical Plate (VP) 3015A to Side Plate (SP) 3112A, CJP weld

at PP122.5]. The welder is identified as 045196 and was observed welding in the 1G position. Welding process was identified as SMAW. ZPMC QC was identified as Mr. Wang Xiang Pin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-1G(1F)-FCM-Repair. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR 2626 Rev-0.

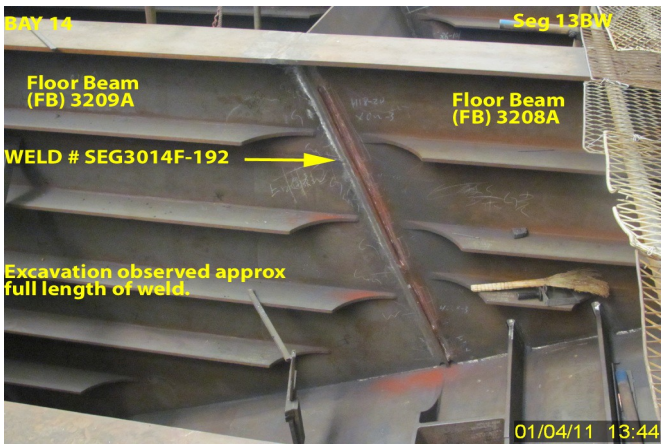
OBG Segment 14W

Repair welding of weld joint no: SEG3020Q-058 [FB3320A to Longitudinal Diaphragm (LD) 3049B, CJP weld at PP126]. The welder is identified as 047864 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR 2620 Rev-0.

Repair welding of weld joint no: SEG3020R-033 (FB3320A to LD3048A, CJP weld at PP126). The welder is identified as 051348 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per CWR: B-CWR 2621 Rev-0.

The FCAW process on weld joint no: SEG3020Y-026 (FB3327A to LD3051A, CJP weld at PP127). The welder is identified as 047866 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

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Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer